DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.9/14.3,0.0/1.6

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-000806

Address: 333 Burma Road **Date Inspected:** 09-Nov-2007

City: Oakland, CA 94607

OSM Arrival Time: 2300 **Project Name:** SAS Superstructure **OSM Departure Time:** 800 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Sha Zhi **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component:** Caltrans Mock-Up

Summary of Items Observed:

Caltrans Quality Assurance (QA)Inspector, Ken Jobes, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, to randomly monitor welding and Quality Control (QC) functions. While on site, the QA Inspector observed and/or discovered the following:

Caltrans QA Inspector observed the welding of P268-2 skin plate to A58 stiffener for the 114M Mock-Up Interior Splice Assembly. This weld is identified as MUC-A58-3B. Welding Procedure Specification (WPS) B-T-2231-TC-U5-F, Revision 1, for Flux Cored Arc Welding (FCAW) was being used. The welder was Bai Wenming (Welder I.D. No. 040434). ZPMC American Welding Society (AWS) Certified Welding Inspector (CWI), Sha Zhi (CWI No. 07081551) and Bureau Veritas Inspector, Hou Jing Yao were present during this welding. The QA Inspector verified compliance with the WPS in the following areas:

V	WPS 1	Random Actual	Method
Electrode Class	E71T-1	E71T-1	Visual Observation
Electrode Diamter	1.4 mm	1.4 mm	Visual Observation
Amperage	280 - 350	315	Calibrated Fluke 337 Meter
Voltage	28 - 32.5	30	Calibrated Fluke 337 Meter
Travel Speed	182 - 442 mm/m	in 297	Stop Watch & Tape Measure
Type Shielding	100% CO2	100% CO2	Visual Observation
Gas Flow Rate	18 - 25 L/min	20 L/min	Visual Observation

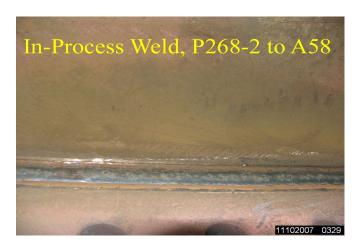
The QA Inspector also observed that the QC Inspector was documenting the parameters as welding progressed and

WELDING INSPECTION REPORT

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that the random verification by the QA Inspector essentailly confirmed the QC documentation for the random sample, and that QC documentation showed compliance with the WPS up to the time of the random sample.





Summary of Conversations:

As identified within the contents of this report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Jobes, Kenneth	Quality Assurance Inspector
Reviewed By:	Cochran,Jim	QA Reviewer